10. (Amended) A multi-layer laminate comprising at least one A-B-C triple layer structure, characterized in that film layer A comprises at least one monovinylarene/conjugated diene block copolymer; film layer B comprises at least one polyvinylidene chloride; film layer C functions as a sealing layer capable of adhering to various materials by heat or pressure according to the usage of said multi-layer laminate and comprises linear low density polyethylene or ethylene vinyl alcohol; said film layer A is an outside layer of said multi-layer laminate; said film layer B is a layer sandwiched between film layers A and C; and said film layer C is an inner layer of said multi-layer laminate.

12. (Amended) A multi-layer laminate according to Claim 10 further comprising a tie layer interposed between film layer B and film layer C to increase adhesion therebetween.

REMARKS

1. Status of claims

After entry of the above amendment, claims 1, 3-6, 8-10, 12-14, 16-20, and 22-24 are pending.

2. Support for amendment

The amendments of claims 1 and 10 incorporate limitations previously recited by claims 2 and 11. The amendments of claims 3 and 12 correct the dependencies of these claims. A copy of the amended claims, with insertions and deletions indicated by underlining and brackets, respectively, is attached hereto as an Appendix. No new matter has been added by this amendment.

3. Claim rejections under 35 U.S.C. §102

First, claims 1-3, 6-8, 10-12, 15-18, and 20-22 are rejected under 35 U.S.C. §102(b) as being anticipated by Yamada, U.S. Pat. No. 5,194,109 (hereinafter "Yamada"). The Examiner alleges Yamada teaches a laminate comprising a polyvinylidene chloride (PVDC) core layer and a base layer comprising styrene-isoprene, styrene-butadiene, or polyethylene. As it applies to claims 1, 3, 6, 8, 10, 12, 16-18, 20, and 22, as amended, Applicants respectfully traverse this rejection.

The present claims, as amended, recite a triple layer A-B-C structure, in that order, wherein the A layer comprises a monovinylarene/conjugated diene block copolymer, the B layer comprises at least one polyvinylidene chloride, and the C layer is a sealing layer comprising polyethylene or ethylene/vinyl alcohol.

Yamada, in contrast teaches a structure comprising, in order, a gas barrier layer, which can comprise PVDC (col. 3, lines 28-35); an adhesive resin, which can comprise styrene-butadiene or styrene-isoprene (col. 3, lines 36-44); and a base material layer, which can comprise polyethylene (col. 3, lines 6-16). Yamada does *not* teach a PVDC layer disposed between, *e.g.*, a styrene-butadiene layer and a polyethylene layer. Therefore, Yamada does not disclose every element of the present claims and cannot anticipate them. Applicants request this rejection of claims 1, 3, 6, 8, 10, 12, 16-18, 20, and 22, as amended, be withdrawn.

Second, claims 1-3, 5-8, 10-13, 15-18, and 20-23 are rejected under 35 U.S.C. §102(b) as being anticipated by Percec et al., U.S. Pat. No. 5,084,352 (hereinafter "Percec"). The Examiner alleges Percec teaches a first polymeric layer, which can comprise polyethylene; a heterogeneous inner layer, which can comprise PVDC; and a third polymeric layer, which can comprise

styrene-isoprene or styrene-butadiene. As it applies to claims 1, 3, 5-6, 8, 10, 12-13, 16-18, 20, and 22-23, as amended, Applicants respectfully traverse this rejection.

As stated above, the present claims are directed to a triple layer A-B-C structure, in that order, wherein the A layer comprises a monovinylarene/conjugated diene block copolymer, the B layer comprises at least one polyvinylidene chloride, and the C layer is a sealing layer comprising polyethylene or ethylene/vinyl alcohol.

The specification of Percec teaches that "block copolymers of styrene-butadiene or styrene-isoprene" can be components of heterogeneous blends and corresponding inner layer films (col. 6, lines 17-20 and 33-34), and "corresponding outside layers of these three-layered structures could be comprised of other polymers listed herein or of polyolefins described previously" (col. 6, lines 33-37). The phrase "other polymers listed herein" indicates that, in embodiments of Percec wherein the heterogeneous inner layer comprises styrene-butadiene or styrene-isoprene, neither of the outer layers comprises styrene-butadiene or styrene-isoprene.

The claims of Percec appear to be written more broadly than the passage of col. 6, lines 17-37, in that they claim a multilayer film comprising a first polymer film (which can comprise "block copolymers of styrenebutadiene or styrene-isoprene") and a heterogeneous polymer blend film (which can comprise "block copolymers of styrenebutadiene or styrene-isoprene") (Percec, claim 3). However, the claims of Percec which recite a third layer (called "a third polymer film layer"), with the heterogeneous polymer blend film sandwiched between the first film and the third film, namely, claims 4-14, only disclose polyethylene in the third layer in embodiments in which the first layer also comprises polyethylene (e.g., claims 9 and 14). Therefore, Percec does not disclose an A-B-C triple layer structure wherein the A layer comprises a monovinylarene/conjugated diene block copolymer, the B layer comprises at least one

polyvinylidene chloride, and the C layer is a sealing layer comprising polyethylene or ethylene/vinyl alcohol. Thus, Percec cannot anticipate the present claims, and this rejection of claims 1, 3, 5-6, 8, 10, 12-13, 16-18, 20, and 22-23, as amended, should be withdrawn.

Third, claims 1-13 and 15-23 are rejected under 35 U.S.C. §102(b) as being anticipated by Lin et al., U.S. Pat. No. 5,292,590 (hereinafter "Lin"). The Examiner alleges Lin teaches a PVDC layer sandwiched between two layers of elastomeric materials, such as Kraton styrene-butadiene block copolymers. As it applies to claims 1, 3-6, 8-10, 12-13, 16-20, and 22-23, as amended, Applicants respectfully traverse this rejection.

The present claims, as amended, recite a triple layer A-B-C structure, in that order from outside to inside, wherein the A layer comprises a monovinylarene/conjugated diene block copolymer, the B layer comprises at least one polyvinylidene chloride, and the C layer is a sealing layer comprising polyethylene or ethylene/vinyl alcohol.

Lin discloses a multi-layer tire innerliner comprising a PVDC gas barrier sandwiched between surface layers comprising a thermoplastic elastomer or different elastomers (col. 2, lines 39-42; col. 3, lines 41-46; col. 5, lines 3-31). The surface layer of the innerliner, which is the layer which adheres to both the carcass ply of the tire and the barrier material (col. 5, lines 15-19), can be Kraton (styrene-butadiene block copolymer) or Santoprene (a mixture of polypropylene and ethylene propylene diene monomers). However, Lin does not disclose a multi-layer laminate comprising a polyethylene or ethylene/vinyl alcohol sealing layer between the gas barrier and the carcass ply, and therefore, Lin cannot anticipate the present claims. Applicants request this rejection of claims 1, 3-6, 8-10, 12-13, 16-20, and 22-23, as amended, be withdrawn.

4. Claim rejections under 35 U.S.C. §103

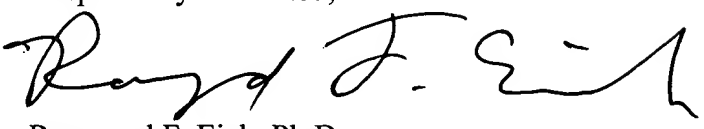
Claims 14 and 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lin, as described above, in view of Schirmer, U.S. Pat. No. 4,847,148 (hereinafter "Schirmer") or Newman, Jr., et al., U.S. Pat. No. 3,645,838 (hereinafter "Newman"). The Examiner points to Schirmer and Newman as teaching tie layers for adhering PVDC films to styrene-based films. Applicants respectfully traverse this rejection.

For the sake of argument, in light of Schirmer or Newman, one of ordinary skill in the art might consider the adhering of a styrene-butadiene block copolymer to a PVDC barrier layer using a styrene-butadiene block copolymer tie layer or an ethylene/vinyl acetate copolymer tie layer (e.g., Newman, Examples 1-2, cols. 2-3) in the composition of Lin; but as discussed above, Lin fails to disclose a multi-layer structure comprising a sealing layer comprising polyethylene or ethylene/vinyl alcohol, as recited by the present claims, and thus, the use of a tie layer between other layers of the multi-layer structure is moot. Considering Lin in light of Schirmer or Newman, one of ordinary skill in the art would not be able to conceive of the present invention as a whole. Therefore, Applicants request this rejection of claims 14 and 24 be withdrawn.

5. Final remarks

In conclusion, Applicants maintain all pending claims, 1, 3-6, 8-10, 12-14, 16-20, and 22-24, as amended, are in condition for allowance. The Examiner is invited to contact the undersigned patent agent at (713) 934-4065 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



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APPENDIX

Amended Claims

1. (Amended) A process of making a multi-layer laminate comprising at least one [A-B double] A-B-C triple layer structure, said process comprising laminating film layer A_2 [and] film layer B, and film layer C;

wherein said film layer A comprises at least one monovinylarene/conjugated diene block copolymer; [and]

wherein said film layer B comprises at least one polyvinylidene chloride;

wherein said film layer C functions as a sealing layer capable of adhering to various materials by heat or pressure according to the usage of said multi-layer laminate and comprises linear low density polyethylene or ethylene vinyl alcohol;

wherein said film layer A is the outside layer of said multi-layer laminate;

wherein said film layer B is the layer sandwiched between film layers A and C; and

wherein said film layer C is the inner layer of said multi-layer laminate.

2. (Cancelled)

3. (Amended) A process according to Claim [2] 1 further comprising interposing a tie layer between film layers B and C to increase adhesion therebetween.

7. (Cancelled)

10. (Amended) A multi-layer laminate comprising at least one [A-B double] A-B-C triple layer structure, characterized in that film layer A comprises at least one monovinylarene/conjugated diene block copolymer; [and] film layer B comprises at least one polyvinylidene chloride; film layer C functions as a sealing layer capable of adhering to various materials by heat or pressure according to the usage of said multi-layer laminate and comprises linear low density polyethylene or ethylene vinyl alcohol; said film layer A is an outside layer of said multi-layer laminate; said film layer B is a layer sandwiched between film layers A and C; and said film layer C is an inner layer of said multi-layer laminate.

11. (Cancelled)

12. (Amended) A multi-layer laminate according to Claim [11] 10 further comprising a tie layer interposed between film layer B and film layer C to increase adhesion therebetween.

15. (Cancelled)

21. (Cancelled)